

Service Manual

AV = AVANA BROWN
WH = WHITE

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MW B1 - TECHNICAL DATA
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INTRODUCTION

Before leaving the factory each oven is carefully checked.
It must however, be installed and used correctly.

Despite all the steps taken to make the oven safe, the safety is dependent on the correct installation and the fact the user understands how to use and maintain the oven.

The information in this section should be used as a reminder that the oven is safe and that anyone who uses it must first read the instructions for use in order to be able to use the oven correctly and obtain the best results.

SAFETY

To avoid injury to yourself and damage to the appliance always work to the following rules when servicing an oven.

- Always disconnect the plug from the mains before starting work.
If there is no plug switch-off the electricity supply at the control box.
- When you have finished servicing an oven before you reconnect it to the mains, make sure that:
 - all the internal connections are correct
 - the wires are insulated and not touching the door or the cabinet or anything sharp
 - all the earth connections are electrically and mechanically sound
 - do not modify or anyway interfere with the safety devices built-in to the oven
 - make sure that each replacement part you use conforms to the manufacturer's specifications
- Do not start a repair if you have any doubt as to your ability to complete it.

TECHNICAL DATA

- Dimensions
 - Cabinet
 - height : 395 mm
 - width : 550 mm
 - depth : 570 mm
 - Cavity
 - height : 240 mm
 - width : 345 mm
 - depth : 370 mm
- Weight
 - Netweight : 33 kg
 - Grossweight : 36 kg
- Versions
 - Supply voltage : 220 V and 240 V $\pm 10\%$ - 50 Hz
 - Current consumption full power : approx. 13 A (UK version)
14 A (Continental version)
13 A (Swedish version)
 - Current consumption Stand-by : 0.5 A
- Mains fuse (in the oven) : T 6.3 A (delayed) (Microwave part)
- Power line fuse : 16 AT (Continental version)
13 A (UK version)
10 A (Swedish version)
- Power consumption : MW = 1300 W
Grill = 1900 W
F.A. = 1700 W
- Magnetron
 - : 2 M 240
 - Operating frequency : 2450 \pm 25 MHz
 - Output power : 700 W
600 W (Swedish version)
- Power levels : 20-100%
- Thermostat : 50-250°C
- Timer : Electronic
- Heater voltage : 3.3 V \pm 10%
- Anode voltage : approx. 4 kV d.c.
- Cos φ : approx. 0.95
- Cooling : forced air, max inlet temperature 35°C
- Inrush current : approx. 35 A
- Current leakage to earth : approx. 0.6 mA
- Rectifier current : not possible to measure
- Commercial type number : M930
- Electrical connection
 - 220 V : Cord and plug EU, 16 A with 2 kinds of earth connection
 - 240 V : Cord and fused plug UK

INSTRUCTIONS FOR INSTALLATION

Place the microwave oven on a stable, level surface.

Do not place the appliance close to heat sources.

To allow good air circulation be sure that the air inlet on top part of left-hand side is not blocked.

The air outlet on the top of the oven and the top part of right-hand side shall have at least 5 cm air space to the surroundings.

Take care to follow the same advice if the oven is to be hung on the wall by the wall hanging kit.

INSTALLATION

The oven is set for the voltage indicated on the type plate situated on the back side of the oven.

Check that the oven is connected to the correct voltage and properly earthed.

Use a correct fuse. See chapter "Technical data".

Measure the output power in accordance with the 1 litre of water method.

The measurement is explained in chapter "Measurements and adjustments".

Demonstrate the oven to the customer. Advise the customer of the servicing arrangements.

CAUTION - MICROWAVE RADIATION

PERSONNEL SHOULD NOT BE EXPOSED TO THE MICROWAVE ENERGY WHICH MAY RADIATE FROM THE MAGNETRON, WAVEGUIDE OR ANTENNA IF THEY ARE IMPROPERLY USED OR CONNECTED. ALL INPUT AND OUTPUT MICROWAVE CONNECTIONS, WAVEGUIDES, FLANGES AND GASKETS MUST BE SECURE.

NEVER OPERATE THE DEVICE WITHOUT A MICROWAVE ENERGY ABSORBING LOAD ATTACHED.

NEVER LOOK INTO AN OPEN WAVEGUIDE OR ANTENNA WHILE THE DEVICE IS ENERGIZED.

NEVER OPERATE AN OVEN WITH CABINET OFF WITHOUT MEASURING THE MICROWAVE LEAKAGE AROUND MAGNETRON AND VISIBLE MICROWAVE CONNECTIONS (WELDING JOINTS).

Do not operate the oven if the following conditions exist:

- The door does not close firmly against the door support because of the door being warped or the hinges damaged.
- The door trims or seals are damaged.
- If there is any visible damage to the oven.
- If the door does not close properly.

Avoid operating the oven if known components in the interlock system, oven door or microwave generating assembly are known defective. They must be replaced.

WARNING - HIGH VOLTAGE

IT IS POSSIBLE TO COME IN CONTACT WITH LETHAL HIGH VOLTAGE WHEN WORKING WITH HV TRANSFORMER, HV CAPACITOR, AND MAGNETRON.

THEREFORE NEVER TRY TO MEASURE THE HIGH VOLTAGE. ALWAYS TAKE UTMOST CARE WHEN PERFORMING ELECTRIC MEASUREMENTS INSIDE THE OVEN.

MICROWAVE FUNCTION

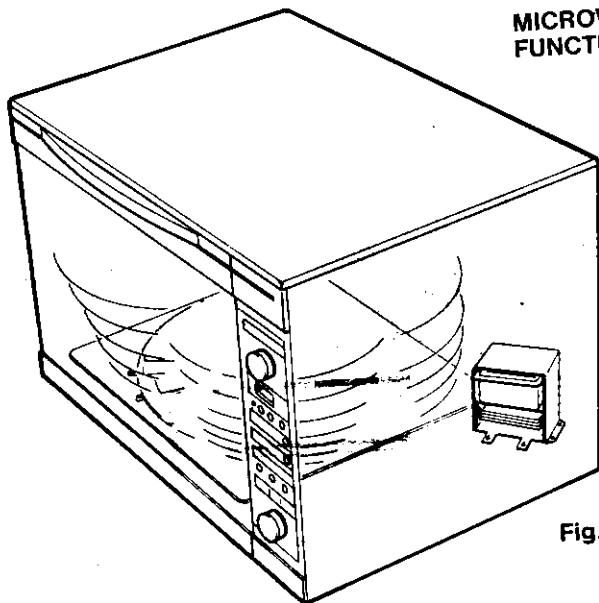


Fig. 1/A

Microwave energy generated by the magnetron is transmitted to the rotating antenna which reflects and distributes the energy into the oven cavity for even cooking results.

GRILL FUNCTION

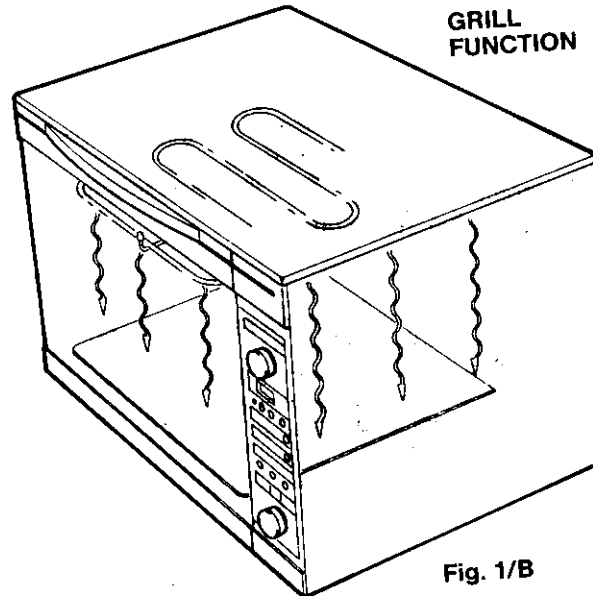


Fig. 1/B

FORCED AIR FUNCTION

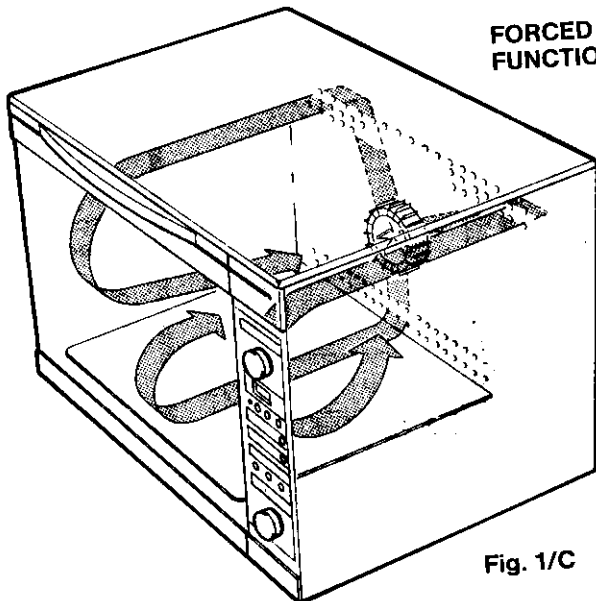


Fig. 1/C

PART NOMENCLATURE

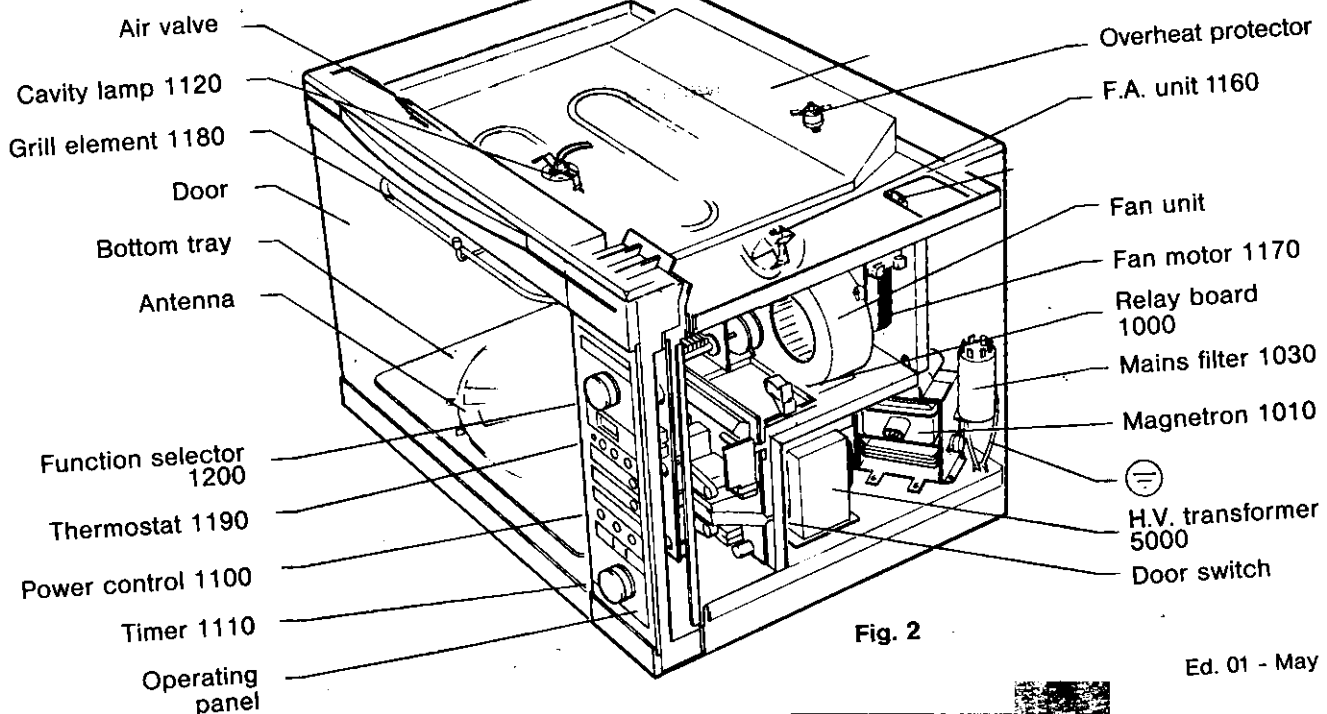


Fig. 2

OPERATING INSTRUCTIONS

1. General

The AVM 930 has three heating sources:

- Microwave
- Forced air
- Grill

Microwave operation can be chosen in combination with one of the above sources.

2. Microwave only operation

- Put the function selector in off position
- Set the desired microwave power
- Set the timer to the desired cooking time
- Press the start button

3. Forced air cooking

- Set the thermostat to the desired cooking temperature
- Set the function selector to either FA full speed or FA half speed as required
- Set the timer to the desired cooking time or to continuous mode
- Press the start button

4. Grill cooking

- Set the thermostat to the desired temperature, for grill this is mostly maximum
- Set the function selector to grill or turbo-grill. Turbo-grill is grill + forced air without heating
- Set the timer to the desired cooking time or continuous mode
- Press the start button.

5. Combinations

Microwave cooking can be combined with either Forced air or Grill, but not all combinations at the same time.

6. Opening the door

All cooking will be interrupted when the door is opened.

7. Jet start

By pressing this button maximum the oven will start and maximum microwave power will be on for 30 secs.

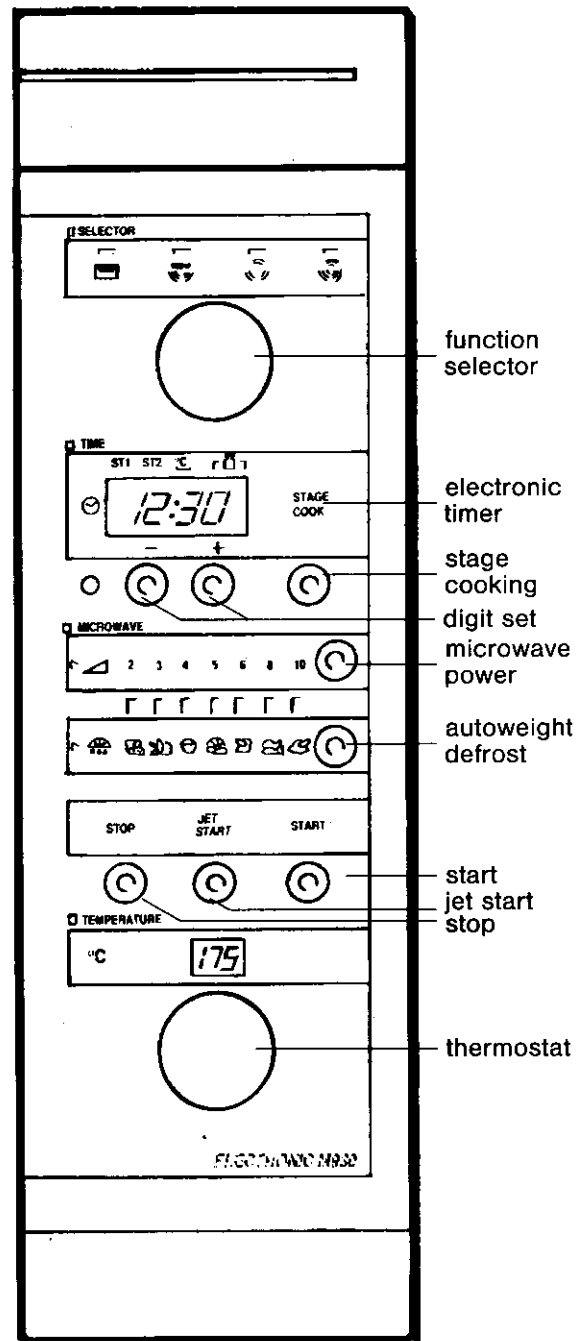
8. Stage cooking

A two-stage cooking program can be chosen by:

- 1) Press the stage cooking button.
- 2) Set the desired combination of microwave power and time.
- 3) Press the stage cooking button again.
- 4) Repeat step 2).
- 5) Press the start button.

9. Auto weight defrost

By inputting the weight and foodclass automatic defrost will start when pressing this button.



DESCRIPTION AND FUNCTION OF COMPONENTS

Interference filter (1030)

Is intended to avoid interference with radio or TV Set during operation.

Cook led (1090)

This led indicates to the user when the oven is in the cooking cycle. When the cycle is finished the light goes off.

Fan motor (1070)

The fan motor drives a blower fan which draws cooling air through the ventilation opening on the right hand side forcing it around the magnetron and transformer. Same air is also forced into the cavity to make the antenna rotate and to remove steam and vapours given off by the cooking food, and then out through the ventilation openings situated on the left hand side.

Cavity lamp (1120)

The cavity lamp illuminates the interior of the cavity so the food can be seen through the door window. The cavity lamps lights anytime cooking time is set.

High voltage transformer (5000)

Purpose of HV transformer is to provide filament voltage for heating the magnetron filament as well as to produce high voltage used for magnetron tube operation.

During a "cook" cycle, the 220 V (240 V) ac applied to the primary winding is converted into approximately 3.3 V ac on filament winding, and in to approximately 2300 V ac on the high voltage secondary winding of the power transformer.

Half wave voltage doubler circuit (2000)

The half wave voltage doubler circuit consists of a rectifier and a capacitor with bleeding resistor. Purpose of this group is to convert the 2300 V ac coming from the secondary winding of high voltage transformer in to approximately 4000 Volts d.c. needed for magnetron operation.

Magnetron tube (1010)

Magnetron produces microwaves through the interaction of strong electric and magnetic fields. These microwaves are guided into the oven cavity and evenly spread in the cavity by the rotating antenna producing the desired heat in the food.

Failure monitor switch (1150)

This is a normally open switch, which is closed when the door is opened. Should then for any reason the door switches 1055 or 1060 remain closed, the fuse 1002 will blow due to short-circuit. The short-circuit current is limited by resistor 3102.

Door switches (1040, 1140)

These switches are safety switches operated by the door. The switch 1040 interrupts the current to the electronic control and display panel.

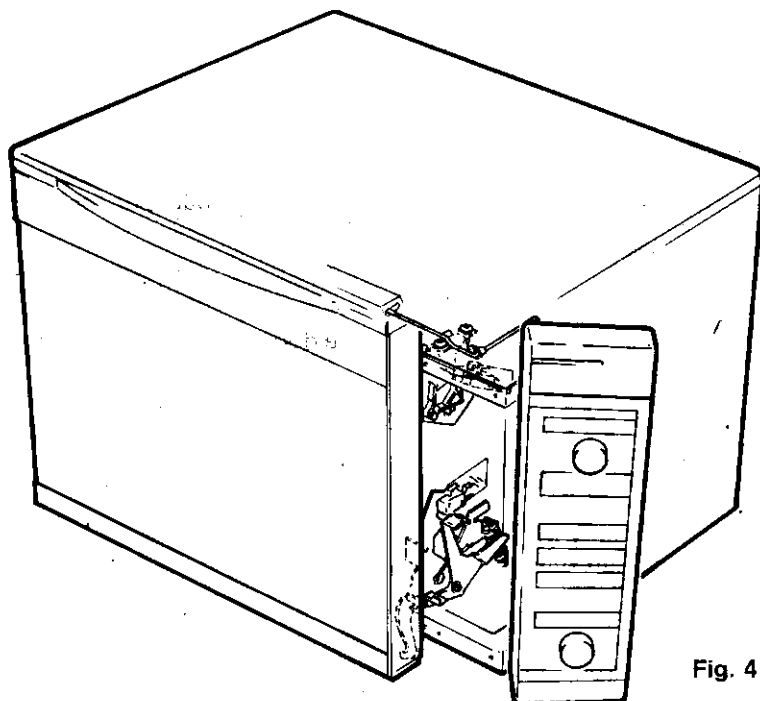
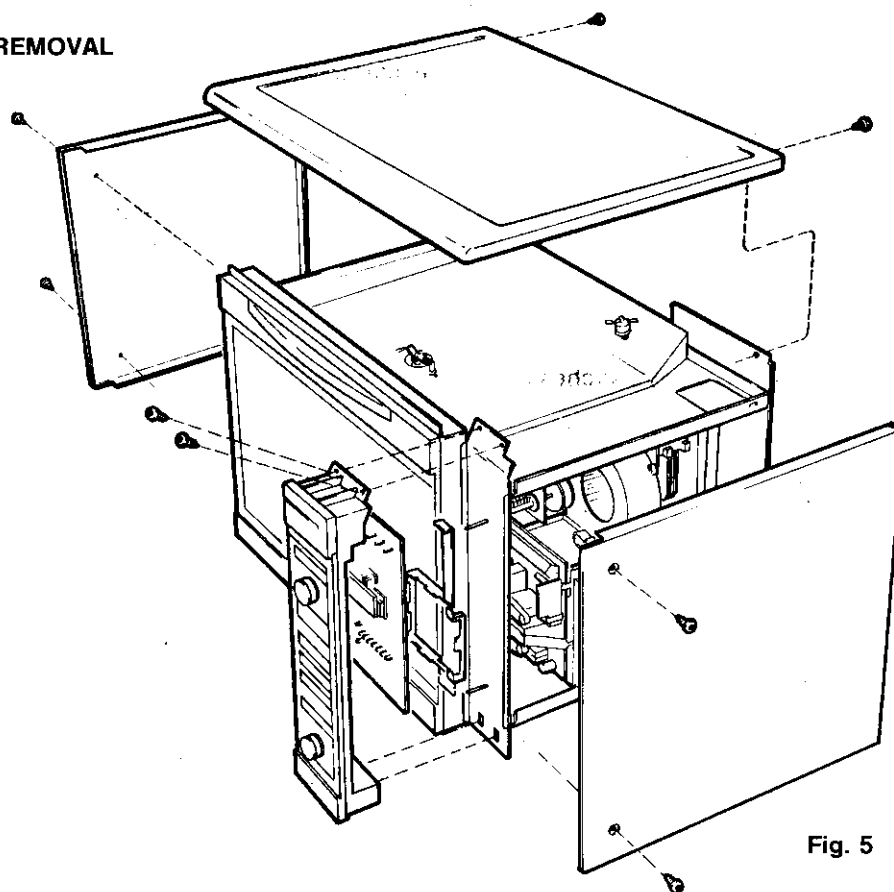
Switch 1040 is the primary door switch and 1140 the secondary door switch.

Note:

Defective switches should be destroyed to prevent possible future use.

INSTRUCTIONS FOR DISMANTLING AND REPLACEMENT**Warning high voltage**

Before removing the outer case unplug the oven.
High voltage parts are accessible when the outer case is removed.

**FRONT PANEL REMOVAL****Fig. 4****TOP COVER AND SIDE PLATE REMOVAL****Fig. 5**

CHANGING CAVITY LAMP

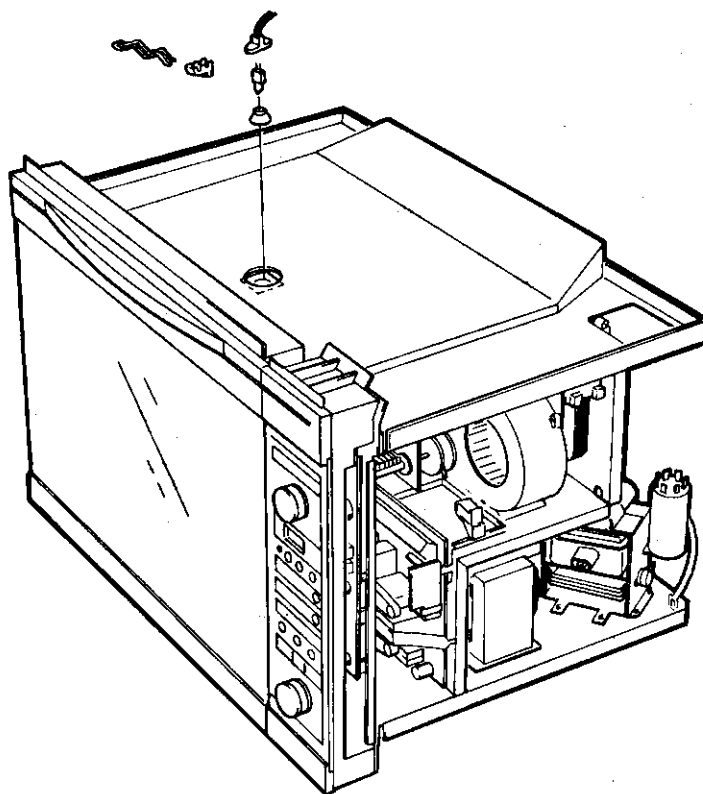


Fig. 6

CHANGING THE GRILL ELEMENT

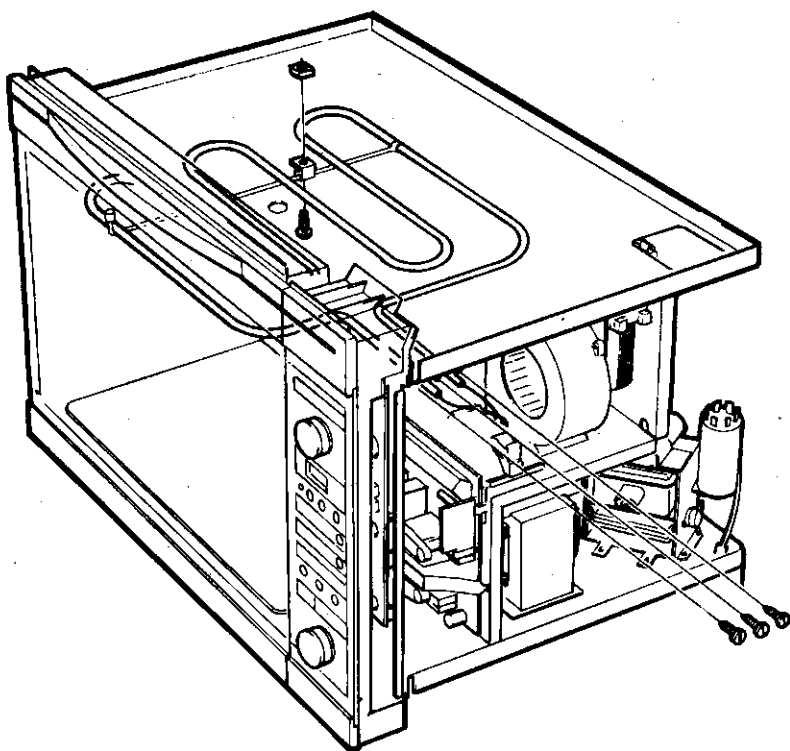


Fig.7

FAN UNIT REMOVAL

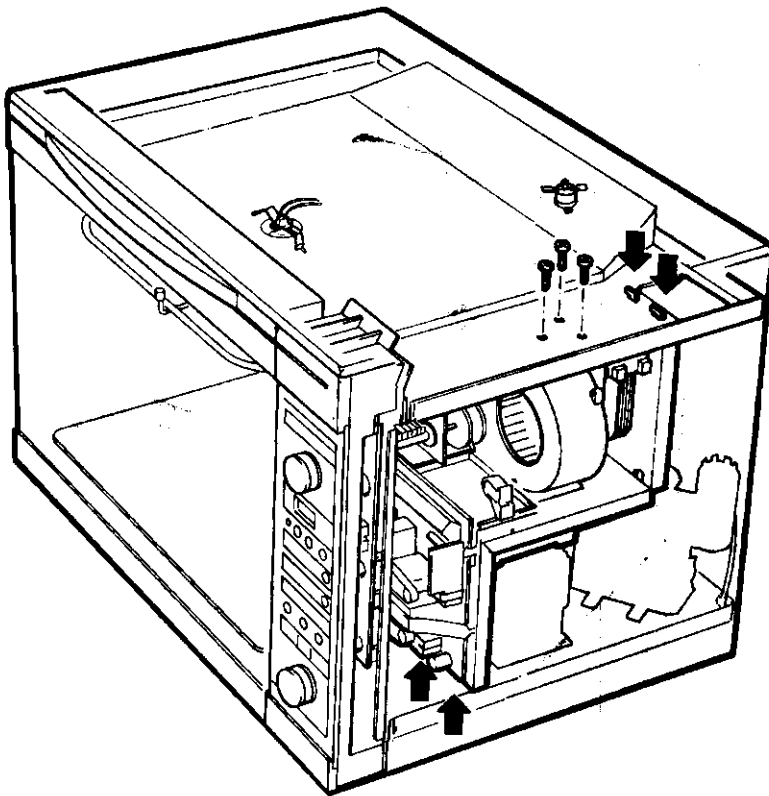


Fig. 8

FORCED AIR UNIT REMOVAL

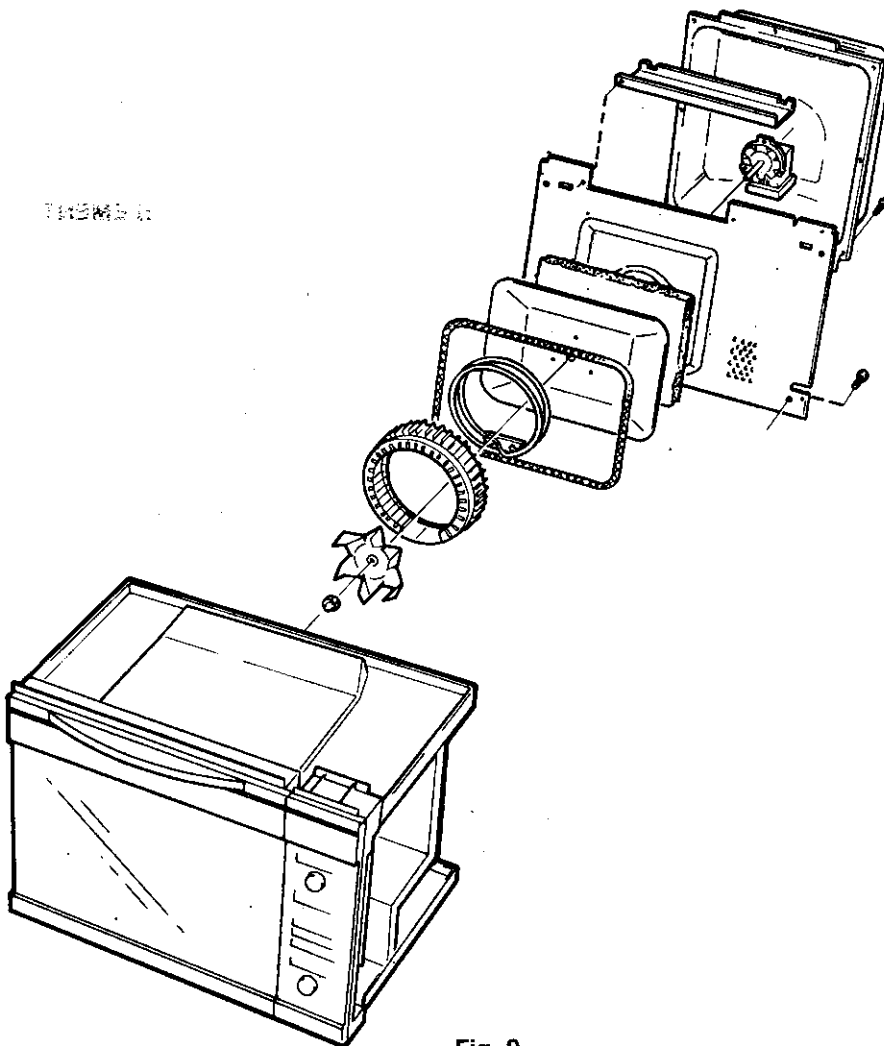


Fig. 9

CHANGING THE ANTENNA

1. Cut through the silicon glue with a model knife
2. Gently use a screwdriver or something similar to remove the bottom tray
3. Replace the antenna
4. Put the bottom tray back
5. Seal the bottom tray by means of silicon glue 4819 690 48045
6. Allow 24 hrs. for the glue to cure

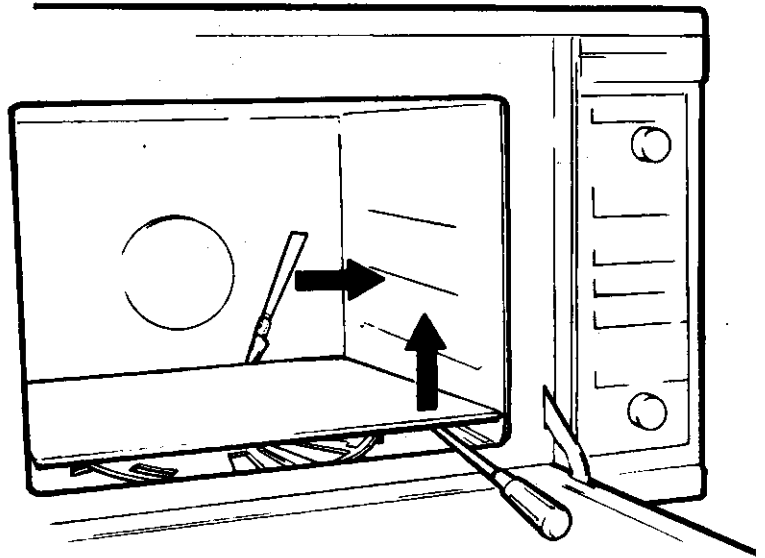
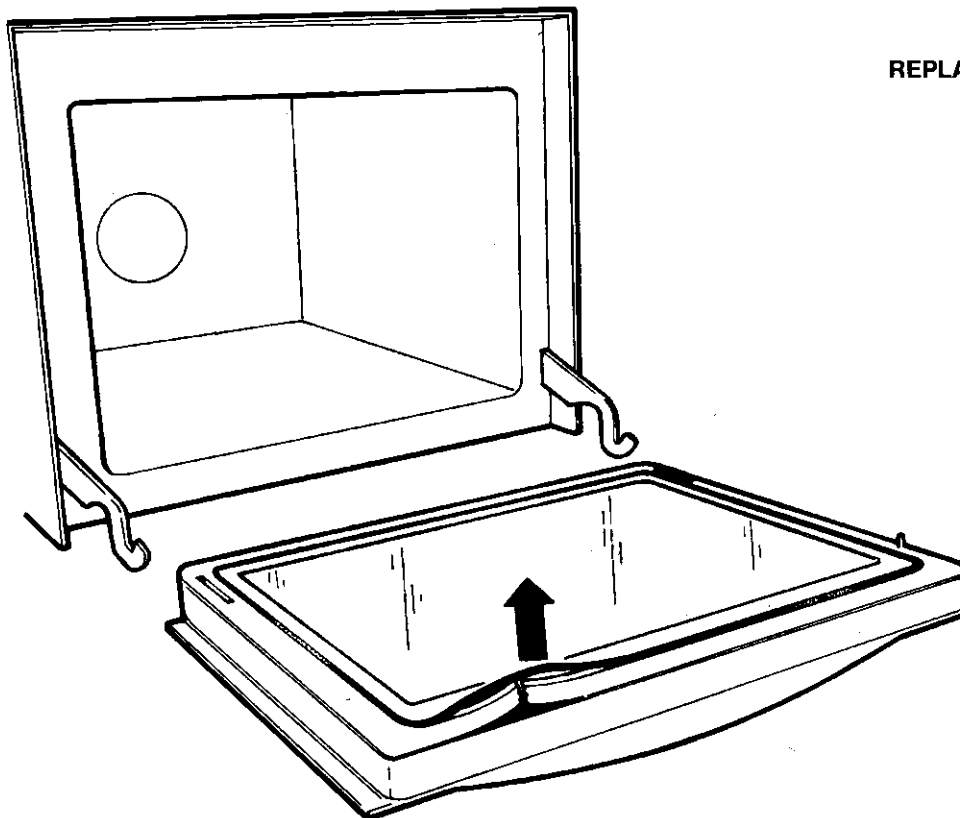


Fig. 10

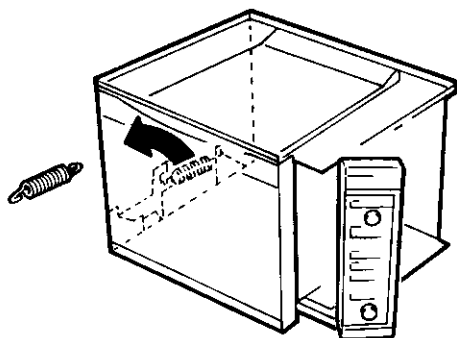


REPLACING THE DOOR INNER FRAME

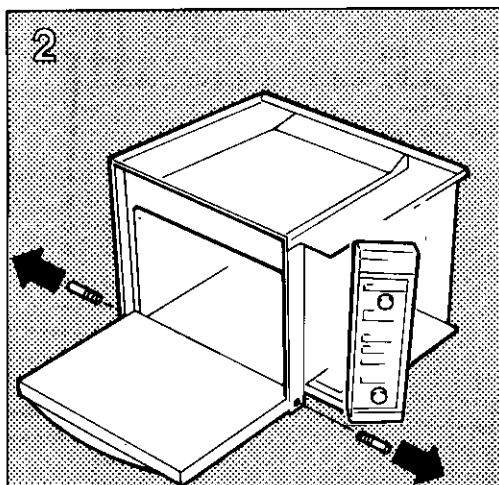
Fig. 11

DOOR REPLACEMENT

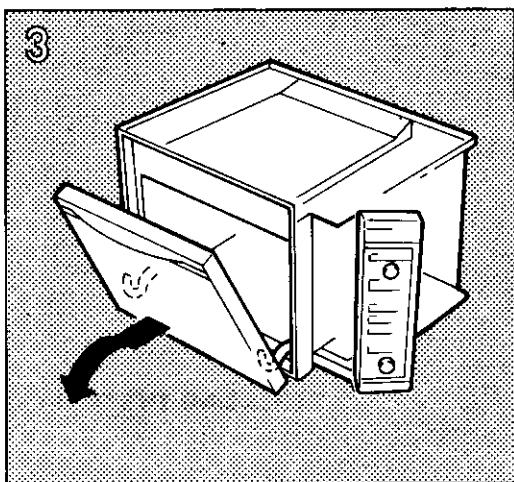
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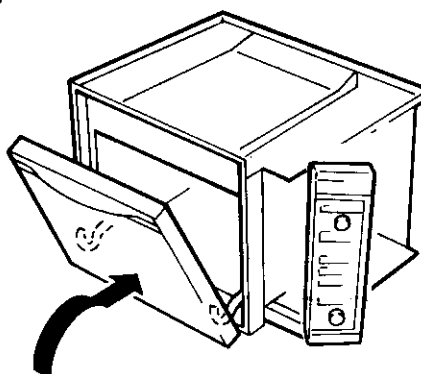
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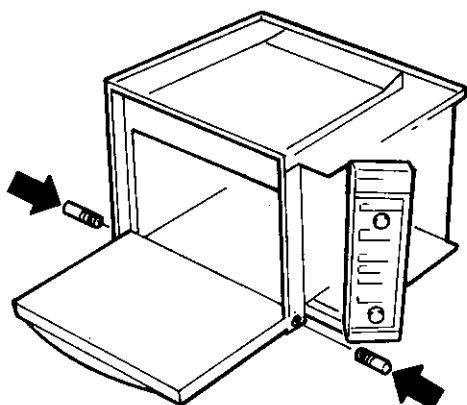
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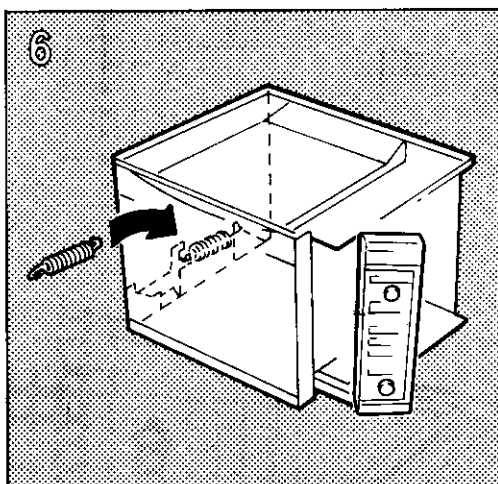
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5



6



MEASUREMENTS AND ADJUSTMENTS

Filament voltage check

Caution: Approximately 2300 V ac are present at the high voltage terminals of the transformer during a cook cycle. During test operation keep meter, hands etc., well away from high voltage terminals.

- Disconnect the oven and discharge the capacitor with an insulated screwdriver.
- Remove wires connecting the capacitor to the high voltage terminal on the transformer.
- With alligator clips, connect the voltmeter across the magnetron filament terminals and stand well away from the meter and its leads.
- Apply power and put the oven into cook cycle, the meter should indicate approximately 3.3 V ac.

Caution: Switch off the oven before disconnecting the meter.

- If no voltage is indicated by the meter, set the meter on the proper range and check if 220 V (240 V) ac are present at the primary winding of transformer during the "cook" cycle. If the input voltage is normal but no filament voltage is present replace HV transformer.

Anode voltage

Due to the presence of the high voltage (approx. 4 KV) it is **not for safety reasons allowed nor necessary** to measure anode voltage, normally a continuity test of transformer windings and a capacitor check as described in components checks section are sufficient to determinate if anode voltage is correct or not.

Measuring the output power

The temperature of one litre of water will rise 14,3°C per minute, if the output power of the oven is 1 kW.

For measuring the output power, proceed as follows:

- Check that the oven and the bottom tray are clean.
- Place one thin walled glass beaker with a diameter of approx. 10 cm. filled with one litre of water, in the centre of the oven cavity after having measured the temperature of the water.
- Start the oven at max. for one minute, checked by the watch (start measuring time when hum from transformer starts).
- Measure the average temperature increase, i.e. temperature after 1 minute minus temperature at the beginning.
- Divide the results by 14.3, the value gives the power in kW.
- The output power of the oven should be higher than 700 W –20% (= 560 W) for the lifetime of the oven.

Repeat this measurement a few times.

- Note: for the Swedish version the nominal output power is 600 W.
- Note: This test is only meant as an indication and will not be accurate to give an exact output power.

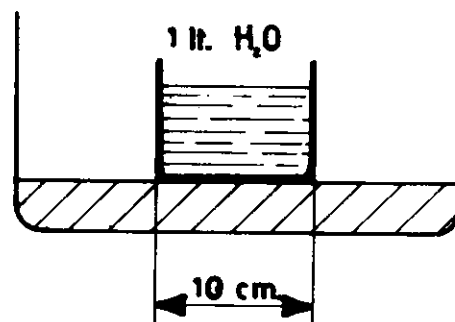


Fig.13

R.F. LEAKAGE**Important**

An R.F. leakage check should be performed before and after every repair or adjustment.

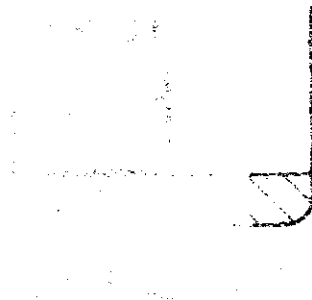
To perform the R.F. leakage check proceed as follows:

- Fill a glass beaker with 275 milliliters of tap water and place it in the centre of the cavity.
- Adjust the R.F. meter according to operational instructions.
- Start the oven on full power, set the timer to at least 3 minutes.
- Check the oven by moving the probe not faster than five centimeters per second, starting at the right hand top side of the door, clockwise, back to the starting position. Also a check over the entire visual screen must be made. Readings have to be always below 5 mW/cm².

Note: For a proper leakage test, position the oven so that it is possible to run the probe under and perpendicular to bottom edge of the door.

Important

If the reading is over 5 mW/cm² the oven and the door should be checked for damages and the door alignment to the cavity should be checked. Make sure that the door is closing properly.



Of course to test the cavity for leakage, the door must be closed. The probe is then moved along the bottom edge of the door, starting at the top right corner and moving clockwise. The probe should be moved at a speed of not more than 5 cm per second. The reading on the meter should be below 5 mW/cm². If the reading is higher, the door should be checked for damage and alignment. The door should be closed properly. The power should be set to full power. The timer should be set to at least 3 minutes. The probe should be moved along the bottom edge of the door, starting at the top right corner and moving clockwise. The probe should be moved at a speed of not more than 5 cm per second. The reading on the meter should be below 5 mW/cm². If the reading is higher, the door should be checked for damage and alignment. The door should be closed properly. The power should be set to full power. The timer should be set to at least 3 minutes.

COMPONENTS CHECK

Magnetron check

● Filament test

Disconnect the oven from the mains. Discharge the HV capacitor. Disconnect the high voltage wires from the magnetron filament terminals.

Measure the resistance across the two magnetron filament terminals.

Correct reading is less than 1 Ω .

If high resistance or infinite resistance is found, replace the magnetron.

● Shorted magnetron test

Connect ohmmeter between magnetron filament terminals and chassis, the reading on the meter should be infinite, if there is low resistance the magnetron is grounded and must be replaced.

Note: When replacing the magnetron:

- Do not reverse wires connected to magnetron terminals.
- Do not operate the oven with the R.F. gasket missing or damaged, the R.F. gasket is located around the dome of the magnetron tube to prevent any leakage of energy from it.

Caution: When replacing the magnetron care has to be taken to avoid the dome being scratched by any metallic parts. Small particles of any metal in the ceramic dome will greatly reduce the life of the magnetron.

Capacitor and diode check

Capacitor check

An open circuit capacitor will result in no high voltage to the magnetron.

A shorted capacitor normally causes high mains current blowing the line fuse.

An ohmmeter can be used to check for a shorted or open capacitor.

- **Unplug the oven.** Discharge the capacitor. Remove wires from capacitor
- With an ohmmeter set on the highest scale, measure the resistance across terminals "C" and the other terminal. The meter needle should momentarily deflect upward to indicate continuity and should then return to infinity once the capacitor is charged. Reversing the meter leads should give the same indication.
- If the ohmmeter indicates continuity between the capacitor terminals at all the times, or if no meter deflection occurs at all, the capacitor should be replaced.

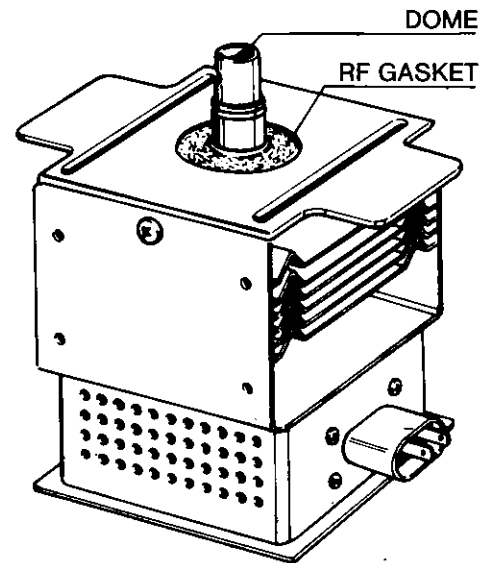


Fig. 14

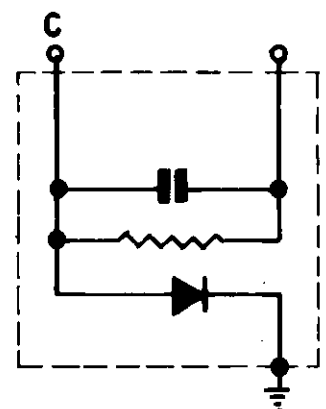


Fig. 15

Diode check

The high voltage diode is built-in in the same case as the HV capacitor.

Unplug the oven, discharge the capacitor and remove wires from it.

With an ohmmeter set on the highest scale, measure the resistance across terminal "C" and capacitor case.

Reverse the meter leads and again observe the resistance reading. A normal diode should read infinite resistance in one direction and approximately 50 K Ω or less when the meter leads are reversed.

Note: Meters operated with less than 6 V battery are not adequate for these checks. The meter should be first checked with a diode known to be good before judging a diode to be defective.

Safety switches check

Disconnect the oven, remove wire from terminal 1 of the switch, connect an ohmmeter to the terminals 1 and 4. With **closed door** reading should be short circuit, with **open door** reading must be **infinite**.

If reading is short circuit or infinite all the time, the switch must be replaced.

Note: If a safety switch is replaced make sure it is activated when the door is closed.

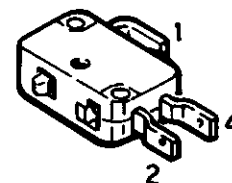


Fig. 16

Failure monitor switch check

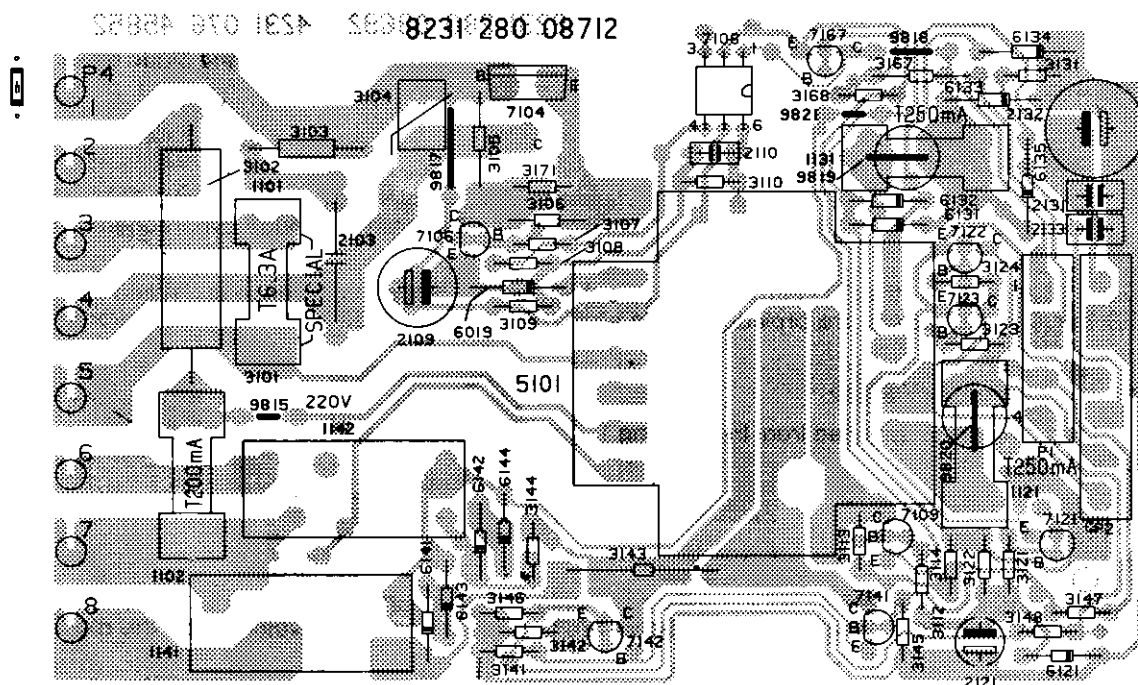
Disconnect the oven, remove one wire from the switch, connect an ohmmeter to the terminals of the switch. With **open door** reading has to be short circuit, with **closed door** reading has to be **infinite**.

If reading is short circuit or infinite all the time switch must be replaced.

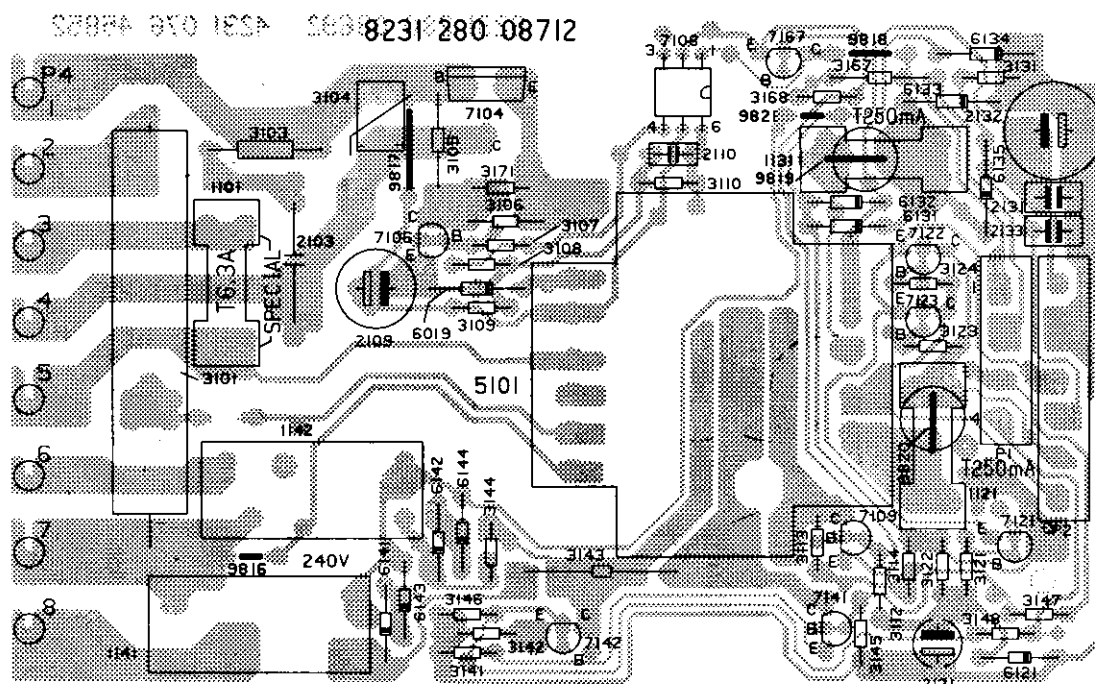
Note: When replacing the failure monitor switch make sure the switch is activated when the door is open.

POWER BOARD

STANDARD VERSION



UK VERSION



1. CIRCUIT DESCRIPTION

2.1. Supply voltages

2.1.1. Supply Voltage for the Electronic Circuitry

The winding between terminals 14 and 15 of the transformer provide a nominal voltage of 35.2 VAC. This voltage is rectified in the bridge consisting of the diodes 6131 - 6134 and smoothed by the capacitor 2132.

The 50 Hz reference for real time clock and triac sync. is also taken from this winding via the diode 6135. The signal is filtered by resistor 3131 and the capacitor 2133.

2.1.2 Filament Supply Voltage

The winding between terminals 12 and 13 provide the filament with a nominal voltage of 2.5 VAC. This voltage is clamped to U2 through the transistors 7122 and 7123. The transistors are alternately saturated synchronously with the AC-voltage, and are supplied with base current via the FTD.

The transistor 7121 supplies the FTD with a stabilized voltage of ca -29 V with reference to U1, and 7109 does the same for the LED bar. The transistors are provided with a stabilized voltage of -30 V from the zenerdiode 6121.

2.1.3 Opto Isolator Supply Voltage

The optocoupler circuitry is supplied from the winding 1 - 2 of the transformer. The voltage is half-wave rectified in 6019 and smoothed by 2109.

2.2 Relay-drivers

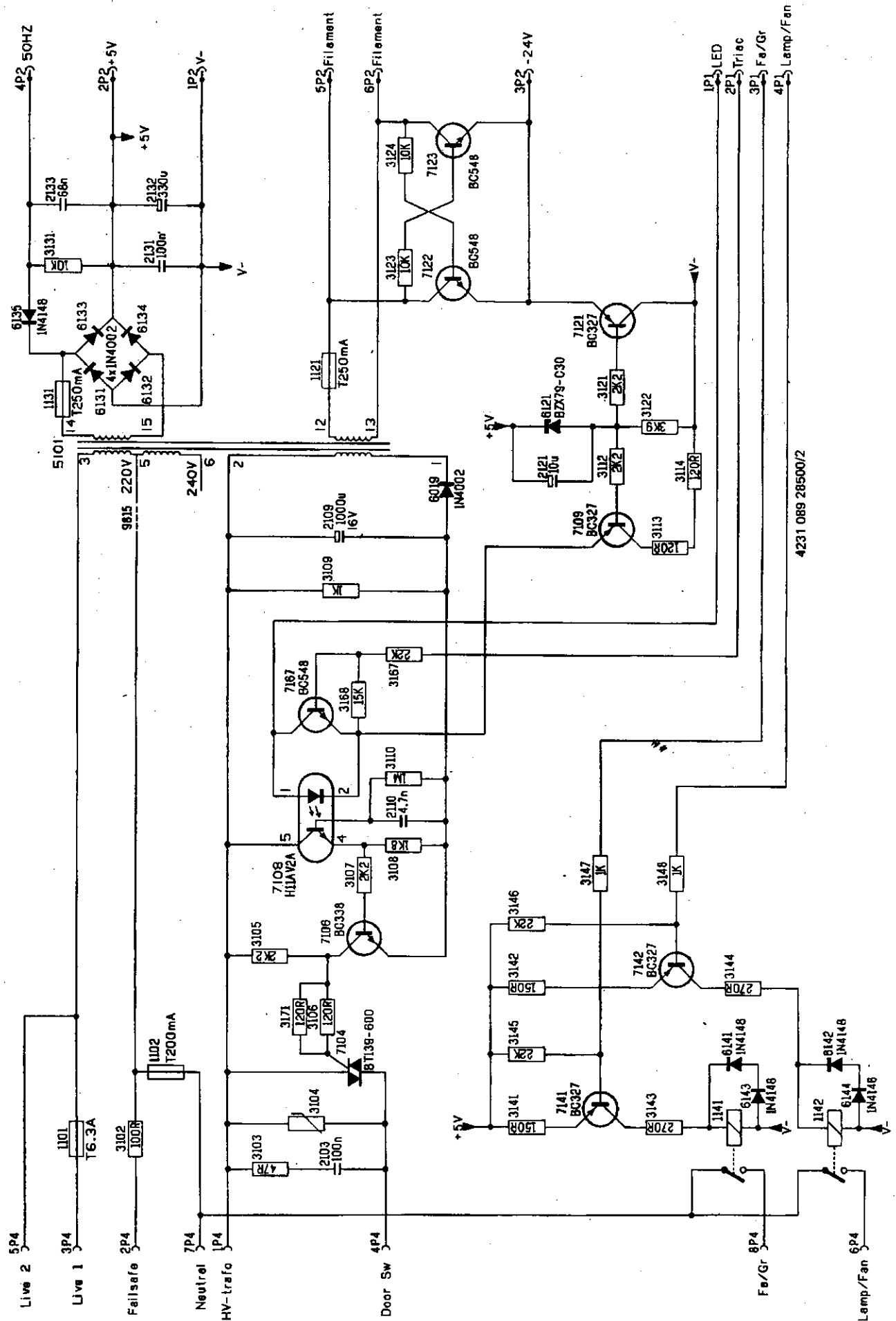
The relays 1141 and 1142 are driven with constant currents from the current generators 7141 and 7142. The current through each relay is approx. 24 mA. The transistors are protected from surge voltages by the diodes 6141 - 6144.

2.3 Opto Isolator and Triac Circuitry

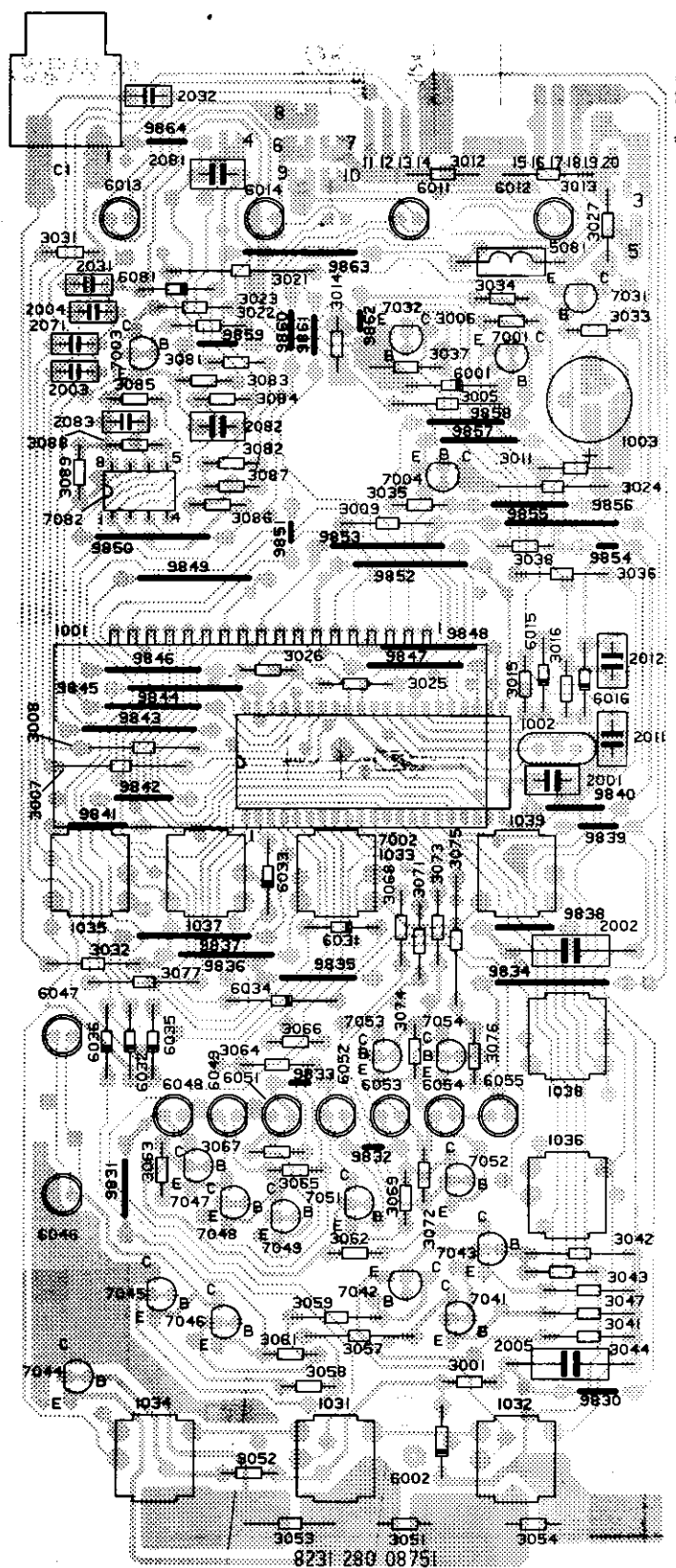
Turning on of the triac is synchronized by the microcomputer. The optocoupler is connected in series with the LED bar on the control board assembly, where a current generator drives a constant current through the LED-array.

The current through 7108 is normally shunted by the transistor 7167, in which case the optocoupler is turned off. When 7167 is turned off, the current passes through the optocoupler-LED, and current passes through the transistor in the optocoupler. This in turn saturates the transistor 7106, and the triac is turned on.

The triac is protected from surge voltages by the VDR-resistor 3104 and the resistor/capacitor circuit 2103/3103.



CONTROL BOARD



1. Circuit description

The circuit diagram can be divided into the following main parts:

- Microprocessor
- Voltage regulator and reset
- LED driving circuit
- Display
- Key detection circuit
- Buzzer drive circuit
- Function drive with LEDs
- Temperature probe interface

2. Microprocessor

The microprocessor controls the complete operation of the oven.

3. Voltage regulator and reset

The voltage regulator and reset circuit consists of the zenerdiode 6001 and the transistor 7001 and the resistors 3005 and 3006. If the voltage across the circuit is lower than the zener voltage, the transistor 7001 is off and holds the reset input of the microprocessor 7002 low.

When the voltage rises above the zener voltage plus U_{be} of 7001, the reset input of 7002 goes high and the voltage between U1 and U0 is stabilized to approx. 5 V. The regulator circuit is supplied with current partly via the resistor 3001 and the zener diode 6002, and partly via the current generator 7044 and the array of LEDs 6046-6049, 6051-6055.

The zenerdiode 6002 provides the current generator 7044 with a constant voltage of -5 V with reference to U0. The transistor 7044 generates a constant current of approximately 13 mA through the LED array. Each LED is shunted by a transistor. The transistors 7045-7047 are driven via the extra driver stages 7041-7043 since the outputs R70-R72 are of the type sink open drain, while the outputs P51-P53, P60-P63 are of the type source open drain. The outputs P51-P53, P60-P63 are provided with internal pull down resistors of typically 80 k Ω .

Due to the base currents into the shunt transistors the current through the LED 6055 will be approximately 19 mA when this LED is lit in the AWD-mode.

4. Display

The display is of the FTD type (Fluorescent Tube Display). The display segments and grids are driven directly from the microprocessor outputs P10-P13, P20-P23 (segments) and P40-P43, P50 (grids). These outputs can drive a high voltage and are provided with internal pull down resistors. The filament of the display also forms the cathode, and the filament voltage is clamped to U2 on the power supply assembly. The display is driven in multiplexed mode, and the grid outputs also provide the scan signals for the key-scanning.

5. Key detection circuit

The keys form a matrix consisting of five row inputs, provided by the display grid signals, and two column outputs, which are detected by the transistors 7031 and 7032. The key switches are isolated from the display segments by diodes in order to prevent the switches from affecting the display. The door switch is also a part of the switch matrix.

If one of the switches 1031, 1032, 1034, 1036 or 1038 is closed there should be negative going pulses on the input K00 of the processor. If one of the switches 1033, 1035, 1037, 1039 or the door switch is closed, pulses can be observed on the input K01.

6. Buzzer drive circuit

The buzzer is driven by transistor 7004. The signal is taken from port R91 of the processor, and this output must be high when the buzzer is off in order to prevent excessive power dissipation in the resistors 3024 and 3027.

7. Function selector with LEDs

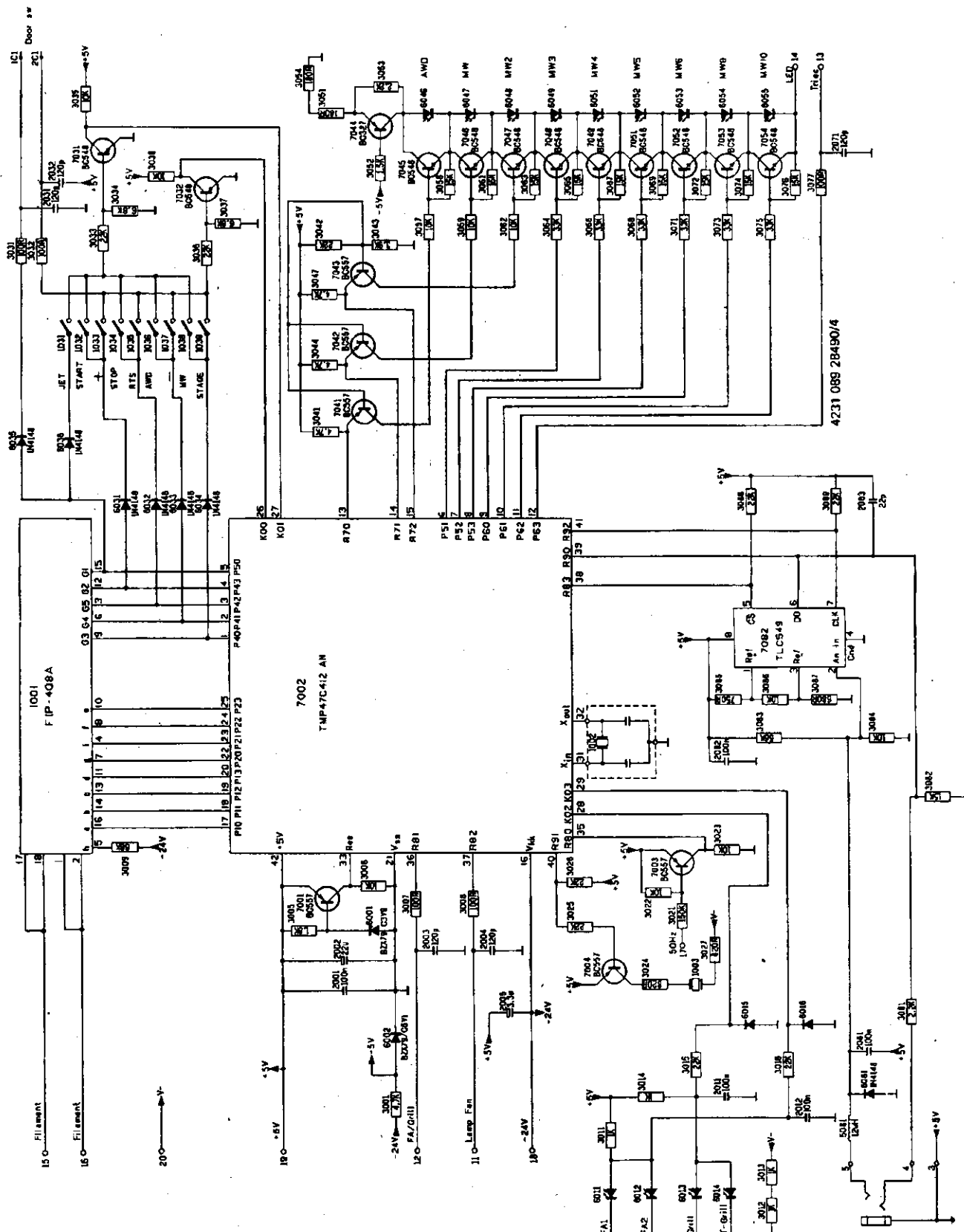
The position of the function selector switch is indicated by the LEDs 6011-6014. The switch position is detected by the inputs K02 and K03 of the microprocessor. The microprocessor can only distinguish between grill positions and FA positions.

8. Temperature probe interface

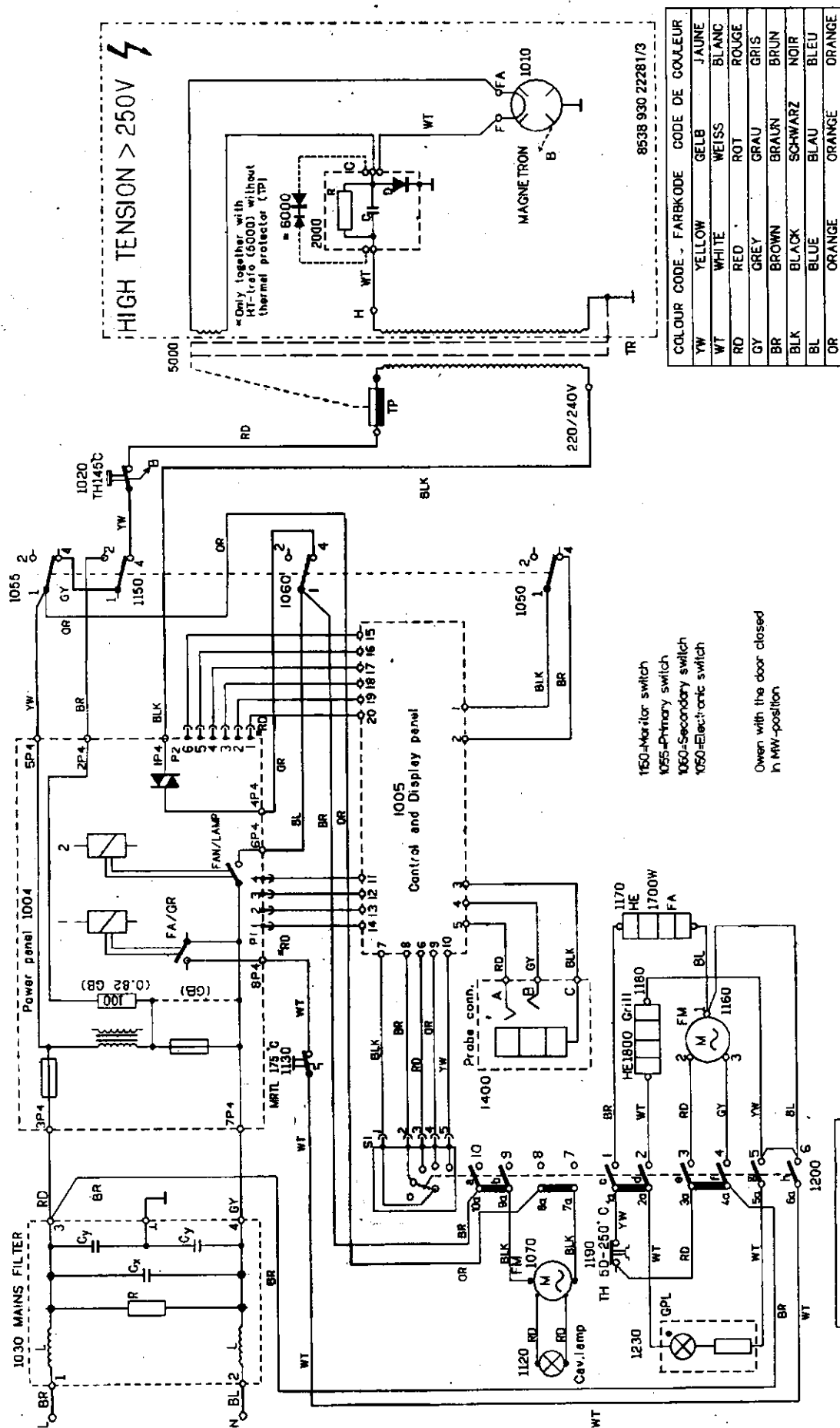
The resistors 3083 and 3084 compensates for the non-linearity of the temperature probe. For the temperature range 35 - 95 degrees centigrade the voltage at pin 2 of 7082 is linear within ± 1 degree. The voltage divider 3065 - 3067 provides a high and a low reference voltage for the A/D-converter. The resolution of the A/D-converter is two units per degree centigrade.

Data is transferred in series from the A/D-converter to the microprocessor. The A/D-converter is selected from port R83 which is connected to the /CS input. The dataflow is controlled by the clock signal from port R92, and data are received on port R92. Normally the output DO on pin 6 on the A/D-converter is in tri-state, so the input R92 on the microprocessor will be held low by 3082.

If a temperature probe is connected, 3081 will cause this input to go to U1. In this way the processor can detect the presence of a temperature probe. If a temperature probe is connected, but the measured resistance corresponds to a temperature below -10 degrees centigrade, it will be assumed that the probe is broken. The oven will go to temperature mode, but will then immediately go back to stand by.

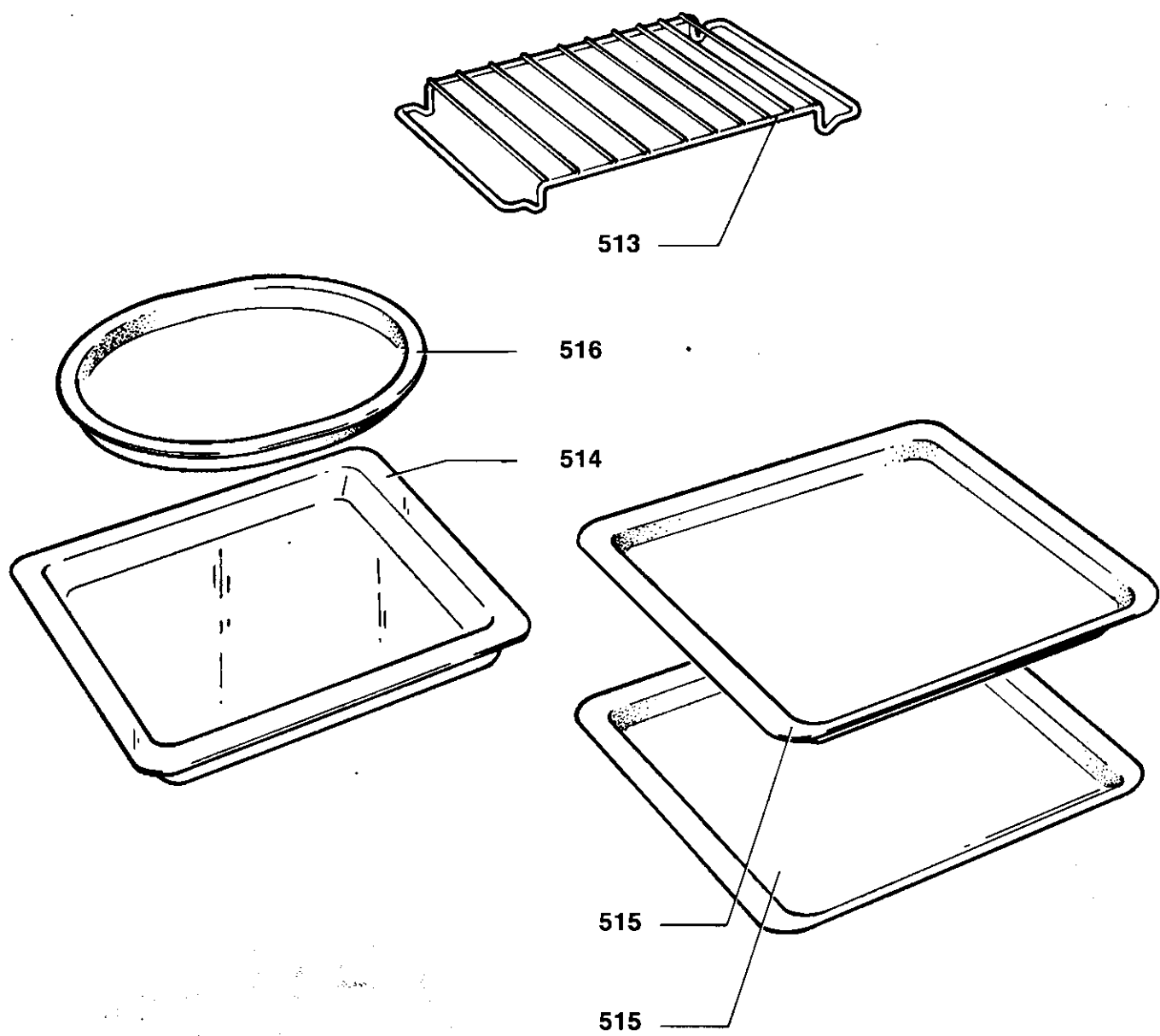


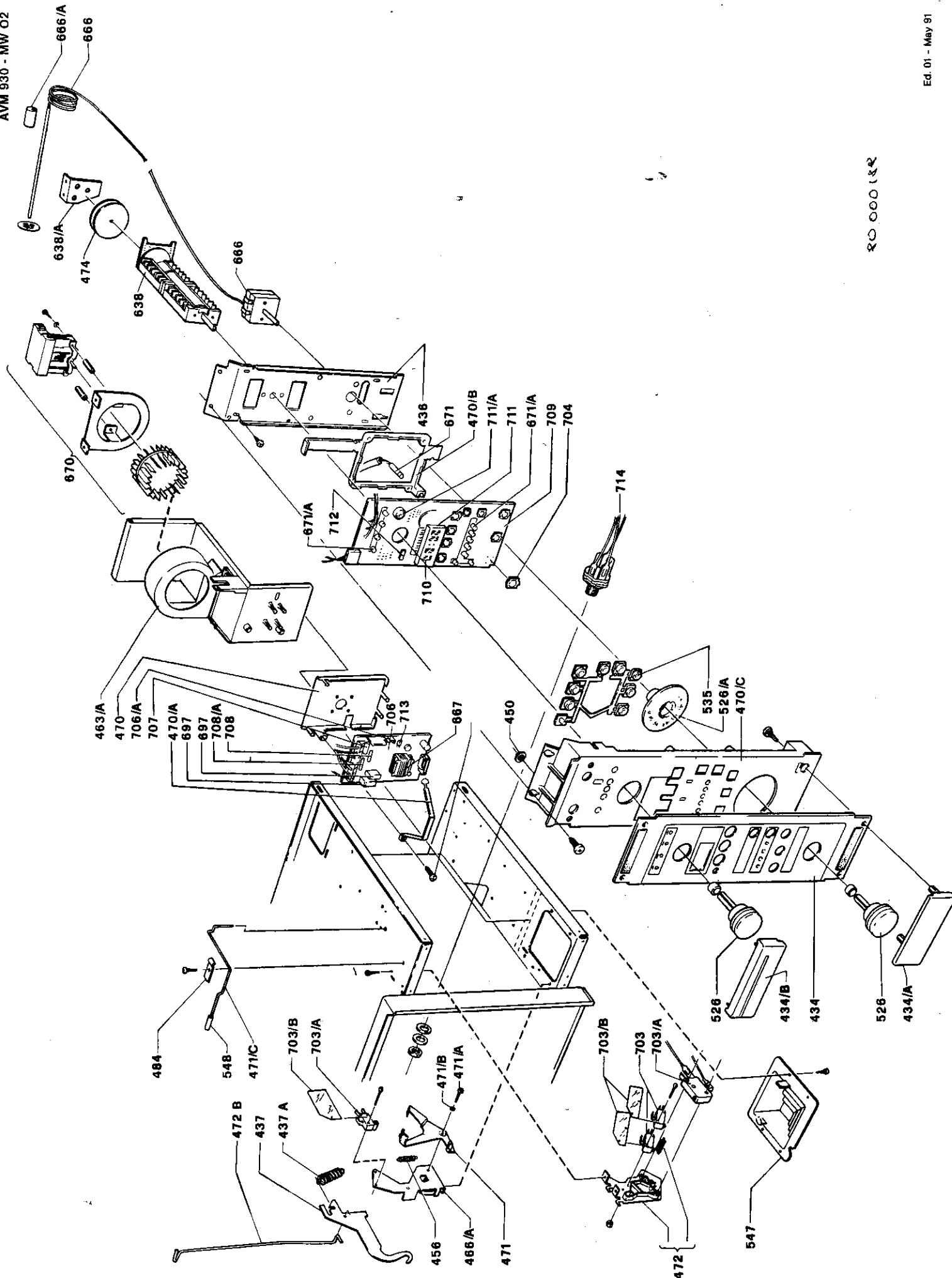
WIRING DIAGRAM



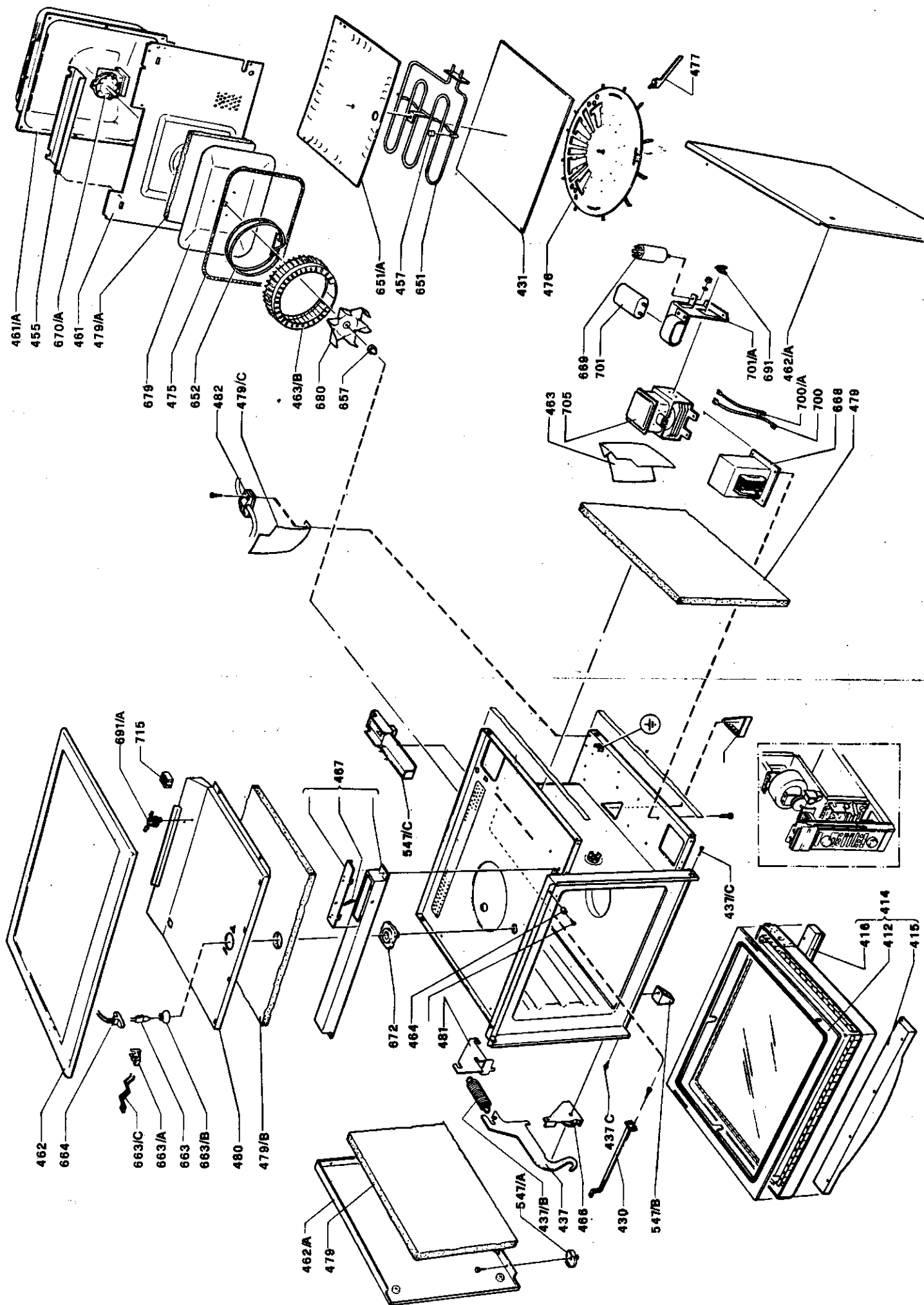
Red line ribbon cable

		Funktion switch							
Switch pos.	a	b	c	d	e	f	g	h	
0. OFF	—	X	—	—	—	—	—	—	
1. Grill	X	—	—	X	—	—	X	X	
2. T-grill	X	—	—	X	—	X	X	X	
3. FATT	X	—	X	—	—	X	X	X	
4. FAY	X	—	X	—	X	—	X	X	





RO 000132



SPARE PARTS LIST

Item	Service Code	Description	Item	Service Code	Description
	4819 310 38672	Temperature probe	479/A	4819 325 18011	Back insulation
	4819 321 18129	Mains cable (general version)	479/B	4819 325 18012	Top insulation
	4819 321 18131	Mains cable (UK version)	479/C	4819 466 88841	Protection
	4819 466 69758	Sealing for F.A -motor	480	4819 440 58901	Top insulation plate
	4819 690 48045	Tube with silicon glue	481	4819 404 78054	Spring holder
	4819 532 68489	Washer for F.A -motor	482	4819 401 18492	Mains cable clamp
412	4819 459 48456	Inner frame door assy	484	4819 401 18495	Clamp for lifting arm
414	4819 440 58912	Door assy AV	513	4819 458 58348	Grill grid
414	4819 440 58915	Door assy WH	514	4819 440 58905	Dripping pan
415	4819 498 69502	Door handle AV	515	4819 440 58906	Backing plate, 2 pcs
415	4819 498 69503	Door handle WH	516	4819 462 79303	Cover for dripping pan
416	4819 462 79307	Decor strip door AV	526	4819 412 58214	Temp./Function knob AV (2 pcs.)
416	4819 462 79299	Decor strip door WH	526	4819 412 58212	Temp./Function knob WH (2 pcs.)
430	4819 404 78052	Holder for capillary tube	526/A	4819 453 48976	Temperature scale
431	4819 466 78163	Ceramic bottom shelf	535	4819 412 58213	Knob AV
434	4819 453 49014	Operating panel AV	535	4819 412 58211	Knob WH
434	4819 453 48975	Operating panel WH	547	4819 462 79296	Air inlet foot black
434/A	4819 453 48986	Decor strip AV lower	547/A	4819 466 98539	Distance for side cover AV
434/A	4819 462 79301	Decor strip WH lower	547/A	4819 466 98538	Distance for side cover WH
434/B	4819 462 79309	Decor strip AV upper	547/B	4819 462 79297	Foot black
434/B	4819 462 79312	Decor strip WH upper	547/C	4819 418 78446	Air channel foot
436	4819 440 59013	Panel background	548	4819 462 48233	Sliding cage for air valve
437	4819 404 78053	Balance arm, 2 pcs	638	4819 271 38116	Function selector
437/A	4819 492 68508	Spring for balance arm right	638/A	4819 404 78056	Support for function selector
437/B	4819 492 68509	Spring for balance arm left	651	4819 259 28633	Grill element 220 V
437/C	4819 535 98354	Hinge shaft, 2 pcs	651	4819 259 28637	Grill element 230 V (Swedish version only)
450	4819 505 18238	Self tapping nut, 4 pcs	651	4819 259 28635	Grill element 240 V (UK version only)
455	4819 466 88839	Drip protection	651/A	4819 466 78164	Cathalytic plate (optional)
456	4819 492 68504	Spring for rocker arm, 2 pcs	652	4819 259 28634	F.A. -element 230 V
457	4819 466 98533	Distance for grill, 2 pcs	652	4819 259 28636	F.A. -element 240 V (UK version only)
461	4819 440 58899	Back cover	657	4819 505 18248	Left-threaded nut F.A.-motor
461/A	4819 462 48231	Cap for back cover	663	4819 134 88142	Halogen lamp 6V 10W
462	4819 440 58914	Top cover plate AV	663/A	4819 255 18165	Adapter for lamp holder
462	4819 440 58904	Top cover plate WH	663/B	4819 380 28007	Lamp reflector
462/A	4819 440 58913	Side cover plate AV	663/C	4819 492 68507	Lamp spring
462/A	4819 440 58903	Side cover plate WH	664	4819 255 18166	Lamp socket
463	4819 440 58897	Air guide for magnetron	666	4819 271 28652	Capillary thermostat
463/A	4819 440 58898	Air separating plate	666/A	4819 492 68505	Stop clip
463/B	4819 458 58347	Air guide F.A. (unfolded)	667	4819 148 68039	Transformer
464	4819 404 78055	Holder for top cover	668	4819 148 68036	H.T. transformer 220 V
466	4819 528 78053	Steering wheel left	668	4819 148 68037	H.T. transformer 240 V (UK version only)
466/A	4819 528 78054	Steering wheel right	669	4819 121 18162	Mains filter
467	4819 360 58462	Valve assy	670	4819 515 28192	Fan assy
470	4819 404 78146	Holder for PCB	670/A	4819 361 78148	F.A.-motor
470/A	4819 404 78147	Bracket	671	4819 134 48257	Indicator lamp
470/B	4819 466 98566	Distance for PCB	671/A	4819 130 38055	Led (13 pcs.)
470/C	4819 466 98565	Distance plate	672	4819 381 18151	Lamp lens
471	4819 404 78047	Rocker arm	679	4819 462 79298	Fan cover F.A.
471/A	4819 502 38188	Rocker arm screw	680	4819 515 28193	Fan wheel F.A.
471/B	4819 532 68488	Curved spring washer	691	4819 271 28653	Thermostat 36TXE21
471/C	4819 492 68559	Lifting arm for valve	691/A	4819 271 28651	Thermostat 175°C
472	4819 528 38351	Cam assy for switch unit			
472/B	4819 404 78049	Latch arm for cam-curve			
474	4819 528 38353	Cam for valve			
475	4819 466 69759	Hot air gasket			
476	4819 303 98021	Antenna assy			
477	4819 303 98022	Antenna wing			
479	4819 325 18013	Side insulation assy, 2 pcs			

Item	Service Code	Description
697	4819 280 68423	Relay (2 pcs.)
700	4819 321 18132	H.T. cable 1
700/A	4819 321 18133	H.T. cable 2
701	4819 121 48009	H.T. capacitor 0.9 μ F (UK and Nordic version only)
701	4819 121 48008	H.T. capacitor 1.05 μ F
701/A	4819 404 78048	Capacitor holder
703	4819 271 38049	Microswitch SA1A, 5 pcs
703/A	4819 271 38029	Microswitch XG2-S20
703/B	4819 325 28007	Insulation 0.5 mm, 3 pcs
704	4819 271 38115	VKS - switch (9 pcs.)
705	4819 131 58017	Magnetron 2M 240 H (P)
706	4819 214 78308	Power board (UK version)
706	4819 214 78307	Power board (STD version)

Item	Service Code	Description
706/A	4819 130 28011	Triac
707	4819 113 88001	Resistor 100 Ω 7 W
707	4819 112 48005	Resistor 0.82 Ω 15 W (UK version)
708	4819 253 58001	Fuse T 6.3 A
708/A	4819 253 38015	Fuse T 250 mA
708/B	4819 253 38011	Fuse T 250 mA (2 pcs.)
709	4819 214 78309	Control board assy
710	4819 130 38044	FTD Display
711	4819 209 88019	Microprocessor
711/A	4819 280 18019	Buzzer
712	4819 209 88012	I.C.
713	4819 130 98002	Opto - coupler
714	4819 264 38007	Probe jack
715	4819 290 68285	Terminal block